

eliciting a statistically significant higher immunoprotection when administered in an immunoprotective dose to test members of a species, as compared to test members of said species not receiving the functional fragment, and

wherein said modified versions comprise one to three amino acid changes but still react with a polyclonal antiserum derived from immunized animals.

27. The influenza antigen of claim 26, wherein the presenting carrier is a (poly)peptide.

28. The influenza antigen of claim 27, wherein the presenting poly(peptide) is selected from a hepatitis B core protein, one or more C3d domains, tetanus toxin fragment C and yeast Ty particles.

29. The influenza antigen of claim 26, wherein the presenting carrier is a non-peptidic structure.

30. The influenza antigen of claim 29, wherein the presenting non-peptidic structure is selected from the group consisting of glycans, polyethylene glycols, peptide mimetics, and synthetic polymers.

31. The influenza antigen of claim 26, further comprising an additional domain for enhancing the cellular immune response immunogenicity of the antigen.

32. The influenza antigen of claim 31, wherein the additional domain is an epitope of an influenza-specific T helper cell or cytotoxic T cell.

33. The influenza antigen of claim 26, wherein the presenting carrier does not substantially alter the tertiary structure of fusion partner (i).

34. The influenza antigen of claim 26, wherein the antigen comprises *Lactococci* cells expressing said fusion product in or on their cell membrane, and said cells optionally release said fusion product.

35. An influenza vaccine comprising the influenza antigen of claim 26 and optionally an excipient.

36. The vaccine of claim 35, wherein the fusion product is in an isolated form.

37. The vaccine of claim 35, wherein the fusion product is anchored in the membrane of an acceptor cell expressing the fusion product.

38. The vaccine of claim 35, wherein the fusion product is part of a membrane fragment.

39. The vaccine of claim 35, wherein the influenza antigen comprises *Lactococci* cells expressing the fusion product in or on their cell envelope.

40. The vaccine of claim 35, further comprising one or more other influenza antigens, for example selected from hemagglutinin, neuraminidase nucleoprotein and native M2.

41. A method of obtaining an influenza vaccine, comprising providing the influenza antigen of claim 26 and mixing it with an excipient.

42. A nucleic acid construct encoding a fusion product, said fusion product comprising

(i) an extracellular part of an influenza M2 membrane protein or a functional fragment thereof or modified versions thereof, and

(ii) a presenting carrier,

wherein said extracellular part contains all or part of the 23 amino acid extracellular domain (amino acid residues 2 to 24 as shown in Table 1) of an M2 protein of influenza A virus or of a similar integral membrane protein of influenza B or C virus, and

wherein said functional fragment is a fragment of an M2 protein capable of eliciting a statistically significant higher immunoprotection when administered in an immunoprotective dose to test members of a species, as compared to test members of said species not receiving the functional fragment, and

wherein said modified versions comprise one to three amino acid changes but still react with a polyclonal antiserum derived from immunized animals.

43. The nucleic acid construct of claim 42, wherein the presenting carrier is a (poly)peptide.

44. A method of obtaining an influenza antigen, comprising:  
providing the nucleic acid construct of claim 42;  
introducing the nucleic acid construct into an acceptor cell;  
culturing the acceptor cell under conditions that allow expression of the fusion product; and  
optionally isolating the fusion product from the acceptor cell or its culture medium, thereby obtaining an influenza antigen comprising the fusion product.

45. The method of claim 44, wherein the acceptor cell is a *Lactococcus* cell.

46. An influenza antigen obtained by the method of claim 44.

47. An acceptor cell containing the nucleic acid construct of claim 42.

48. The acceptor cell of claim 47, wherein the acceptor cell is a *Lactococcus* cell.